

Borough of Chatham.

TO THE MAYOR AND CORPORATION OF THE BOROUGH OF CHATHAM.

GENTLEMEN,

I have the honour to put before you my Report on the general Sanitary condition of your Borough during the year ending December 31st, 1904.

Vital Statistics.

SUMMARY.

Area in Acres	4444.298
Population (Census 1901)	37,057
Population (estimated)	39,179
Births registered	1,172
Birth rate per 1,000	29.9
Nett Deaths registered	630
Death rate per 1,000	16.
Zymotic Death rate	2.3
Infantile mortality per 1,000	178
Annual rateable value	£143,386

POPULATION. — My estimate of the population up to the middle of 1904 is 39,179, but I am inclined to think that a census would show it to be higher, for the proportion of inhabited houses in the District is greater than when the census was taken in 1901. In boroughs of this size the fluctuations are not so great as to make any appreciable difference in the mortality rates, but in large centres of population the difference between estimated and real population is sometimes so great as to completely falsify the returns. Speaking generally, 1904 may be classed as a healthy year, and with the exception of the month of August, when Diarrhoea was very prevalent and fatal, the mortality was not at any time above the average, and but for the large number of deaths amongst infants during that month, would have been much below.

BIRTHS. — The total number of Births registered during 1904 was 1172. Of these 611 were males, and 561 females. There were 44 illegitimate births, 33 of which were in Luton ward.

The following Table shows the natural increase of population — that is, the increase of Births over Deaths, in each division of the Borough during 1904.

	Births.	Deaths.	No. of Births over Deaths.
St. Mary's Ward . . .	247	153	94
Luton Ward	615	214	401
St. John's Ward . . .	310	159	151
	<hr/>	<hr/>	<hr/>
	1172	526	646
Deaths in Institutions..		104	104
	<hr/>	<hr/>	<hr/>
	1172	630	542

The nett result is an increase of Births over Deaths of 542.

Birth rate, 29·9 per 1,000.

DEATHS.—During 1904 the nett total of registered deaths was 630. This differs from the actual figures supplied by the Registrar, because certain corrections are required. These are as follows:— Certain persons have died in the Borough who belong to other localities, and are therefore to be classed as 'non-residents', and eliminated from the list, whilst other persons who have died outside the Borough, but who belong to it, are classed as 'residents', and included in the total. The deaths of the non-residents have occurred in the Medway Union Workhouse, and in Melville Hospital, whilst the deaths of residents have occurred in St. Bartholomew's, St. William's and Fort Pitt Hospitals, all of which are in the Rochester district.

During the years 1901, 1902, 1903, the deaths were 646, 674 and 574 respectively. The total number of deaths occurring in the Public Institutions of the District, and comprising both residents and non-residents were 138 in the Medway Union Workhouse, and 37 in Melville Hospital.

The rate of mortality is 16· per 1000.

A comparative view of the vital statistics for the past ten years will be found in Table I. which is appended to this Report.

The number of deaths occurring during each quarter of the year was as follows:—

First Quarter	167
Second Quarter	115
Third Quarter	190
Fourth Quarter	158

The numbers during each month were : —

January, 53 ; February, 54 ; March, 60 ; April, 32 ; May 56 ; June, 27 ; July, 41 ; August, 92 ; September, 57 ; October, 52 ; November, 36 ; December, 70.

The following table shows the mortality in England and Wales during 1904, in comparison with that of Chatham.

	Annual Rates per 1,000, living			
	Births.	Deaths from	Deaths from	Infant Mortality
		all causes.	seven chief Epidemic Diseases.	
England and Wales	27·9	16·2	1·94	146
76 Great Towns	29·1	17·2	2·49	160
141 Smaller Towns	27·5	15·6	2·02	154
Chatham	29·9	16·	2·3	178

The ages at which deaths occurred were as follows :

Under 1 year	209
1 and under 5 years	52
5 and under 15 years	25
15 and under 25 years	23
25 and under 65 years	193
65 and upwards	128
Total	630

The number of deaths occurring in different parts of the Borough was as follows :

St. Mary's Ward	153
Luton Ward	214
St. John's Ward	159
Medway Workhouse	81
Melville Hospital	23

By ascertaining the number of inhabited houses in each Ward I have endeavoured to arrive at an approximate estimate of their respective populations, and have calculated the rates of mortality as follows :

St. Mary's Ward	16·2 per 1000
Luton Ward	11·3 „
St. John's Ward	13·4 „

I give the above figures merely for their relative worth, and not as absolutely correct, because there is no doubt that the average number residing in each household varies in different parts of the Borough.

The Infant Mortality, or proportion of deaths under 1 year of age to every 1,000 births registered is 178 per 1,000, as compared with 129 during the previous year. This high mortality will be referred to subsequently when discussing the various causes of death.

The chief headings under which the deaths of infants occurred were :—

Measles	3
Scarlet Fever	1
Whooping Cough	1
Diphtheria	1
Diarrhoea	45
Enteritis	17
Tubercular Diseases	5
Bronchitis	16
Pneumonia	11
Syphilis	7
Premature Birth	50
Accidents	5
Convulsions	14

SEX. Of the total deaths registered there were 338 males, and 292 females.

CAUSES OF MORTALITY. So far I have made a bare recital of facts, and I now purpose commenting more fully on the various causes of mortality.

RESPIRATORY DISEASES. From diseases of this character 86 deaths were registered as against 77 during 1903, 120 during 1902, and 108 during 1901.

Bronchitis caused 39 deaths, Pneumonia 43 deaths, and from other Respiratory diseases there were 4 deaths. The mortality from this class of diseases is largely influenced by climatic conditions, and nearly the whole of them occurred during the First and Fourth Quarters of the year when cold and inclement weather was prevalent.

There were a large number of cases of Influenza during the months of November and December, but only one death was directly attributed to this cause.

PHTHISIS. - This disease, otherwise known as Tuberculosis of the Lungs, caused 75 deaths, and from "other Tubercular Diseases" 14 deaths were registered. Tubercular disease does not confine its ravages to the lungs, but affects other organs and parts of the body. It is probably the most generally destructive disease to which the human race is liable, and the largest per centage of its victims is amongst people who are at a period of life when the bodily and mental powers should be at their best, and are therefore most valuable to their families, and to the community.

The infective character of the disease is no longer open to doubt, nor is its mode of propagation questionable. It is primarily due to the presence of a minute organism known as the Tubercle Bacillus, which multiplies so enormously that a few drops of infected sputum may contain millions of Bacilli, and owing to the reckless habit of spitting about, these organisms in the dried but still active state, have been found on the walls, carpets, curtains, and furniture of rooms which have been inhabited by consumptives.

It cannot be too widely known and realised that the expectoration or spit is the chief vehicle of infection, and that when it becomes dried its deadly properties still exist, and it is disseminated in the form of dust, whereby it may be inhaled into the lungs, or may become mixed with milk or other articles of food, and so swallowed.

In my report for 1903, I recommended that the Voluntary Notification of Phthisis should be adopted in the Borough, and your Council acting upon this recommendation issued notices to all the medical men in the Borough requesting them to notify cases of Pulmonary Tuberculosis under their care. The object of notification is to enable a Sanitary Authority to adopt one or more of the following courses:—

(1) To gain information as to the surroundings of a patient, with a view of remedying insanitary conditions.

(2) To leave a handbill containing advice as to the management of the illness.

(3) To supply disinfectant where necessary, or advisable.

(4) To secure the cleansing and disinfection of rooms occupied by consumptive patients, when such occupation has ceased.

I have been somewhat surprised at the limited number of notifications (40) received, because the existing cases are far more numerous than that. Additional information is obtained from the Registrar of

Births and Deaths. who sends immediate notice of any death from Consumption, and thus many rooms are cleansed and disinfected, which would otherwise escape observation.

One of the great difficulties in dealing with a disease of this character is that in the majority of instances it is of long duration and many patients are able to go about their vocations until the later stages of the disease, and therefore such isolation as is practised with many infectious disease is an impossibility. The chief gain from this system of notification is that it leads to the gradual education of the public not only as to the infectious nature of the malady, but to the ease with which infection can be limited by recourse to proper precautions. A reference to the advice which is embodied in a handbill circulated by the Sanitary Department, and which is given to every patient, will show that the spit or phlegm is the chief vehicle of infection, but we must not forget that overcrowding, badly ventilated and dirty houses and workshops are powerful predisposing causes, and while on the one hand a large expenditure is going on in various parts of the country with respect to the provision and maintenance of admirably equipped Sanatoria which are of enormous benefit to the comparatively few cases they treat

and whose educational influence is of a far reaching character—on the other hand what is of infinitely more importance is the improvement of dwelling places, and the strict enforcement of Sanitary laws, and these are essentially the duties of every municipality. In this connection I would urge that the most serious factor we have to deal with in all matters of health is the apathy of the public in personally contributing to the general welfare. Well-built houses, good drainage, pure water supply and adequate ventilation will do much, but their effect is largely discounted unless the people can be made to recognise the fact that the individual practice of sanitary laws is necessary for the well-being of a community, and that the amount of sickness is much more dependent on ignorance and neglect of plain rules of health than on imperfect drainage.

HEART DISEASES caused 54 deaths as compared with 63 during 1903.

From Accidents there were 5 deaths and 1 from suicide.

Cancer and other forms of malignant disease caused 31 deaths, and from diseases of the Nervous System, 56 deaths were recorded.

ZYMOTIC DISEASES.—The subjoined statement shows the mortality from diseases of this class, and also from Enteritis:—

	1904.		1903.		Increase or decrease.
Measles	10	..	13	..	— 3
Scarlet Fever	1	..	3	..	— 2
Whooping Cough	2	..	5	..	— 3
Diphtheria and Membranous Croup	2	..	3	..	— 1
Diarrhoea	69	..	14	..	+ 55
Enteritis	24	..	16	..	+ 8

It will be seen that Small Pox is absent from the above list, and there has been no recrudescence of the wide spread epidemic of 1902.

MEASLES. This disease was prevalent in the Borough, during the second half of the year, but not to any serious extent. On June 1st, by arrangement with the Secretary of the Education Committee, a system of notification by the Head Teachers of the various Elementary Schools was commenced, and it is now the custom to forward once a week, on an approved form, the names and addresses of all children who are absent from School on account of Measles, Chicken Pox, Whooping Cough, or Mumps, and acting on this information all children from infected houses are prohibited from attending school, and in the case of Measles printed directions respecting the management of the disease are supplied. Owing to the receipt of this early information, I have not found it necessary to resort to the compulsory closure of any school. In a large majority of cases no medical man is called in, until Bronchitis or Pneumonia has supervened. All the fatal cases were in children under 5 years of age. It will not be inopportune at this place to venture the suggestion that the Education Committee should use the power they possess to exclude from school attendance all children under the age of 5 years. The majority of children under this age are quite unfit to be sent to school, and I am sure that their mental capacity is not improved by being set to do such lessons as are laid down in the syllabus, and that as far as the future well being of a child is concerned, it would be infinitely better if its education were not commenced until after the age of 5 years. Infectious diseases are more prevalent and more fatal in children of tender years, and as school attendance tends to intensify infection, a gain in this direction would result. Lots of poor people are glad to send their little children in order to get them out of the way, and to have them taken care of, but day nurseries at the public expense should hardly be provided for this purpose.

SCARLET FEVER.—Of this disease 61 cases were notified, and 1 death occurred. 47 cases were removed to St. William's Hospital, and 54 households were attacked.

In the following Table will be found details of Scarlet Fever in the Borough during the past ten years : —

Year.	Population.	Total No. of cases Notified.	No. under 5 Years.	Deaths Registered.	Treated in Hosp.	Attack Rate per 1,000 of Population	Mortality per 1,000.	Per centage removed to Hospital.
1895	33880	123	31	2	100	3·6	·006	81
1896	34503	134	34	3	111	3·9	·008	82
1897	34926	110	30	1	64	3·1	·002	58
1898	35499	173	52	5	107	4·8	·01	62
1899	35972	182	27	9	117	5·	·01	64
1900	36495	101	28	4	72	2·8	·01	71
1901	37057	41	10	—	23	1·1	—	56
1902	37732	74	31	1	50	1·9	·002	67
1903	38407	115	55	3	84	2·9	·008	73
1904	39179	61	21	1	47	1·5	·003	77

WHOOPING COUGH.—Only 2 deaths were registered from this cause, as against 5 during 1903.

DIPHTHERIA AND MEMBRANOUS CROUP.—These diseases are identical in character, the more correct term for the latter being Laryngeal Diphtheria. The number of cases notified was 26 and there were 2 deaths. Thirteen cases were removed to St. William's Hospital.

The number of cases in separate localities was as follows :—

St. Mary's Ward	7
Luton Ward	12
St. John's Ward	6
Medway Workhouse	1

The numbers affected at different ages were :—

Under 1 year	1
1 and under 5 years	2
5 and under 25 years	14
15 and under 5 years	7
5 and under 65 years	2

The following table shows the number of cases, and the deaths from Diphtheria during the past nine years :—

Year.	No of cases.	Deaths.
1896	214	58
1897	121	15
1898	129	9
1899	97	17
1900	55	8
1901	80	9
1902	35	7
1903	23	3
1904	26	2

ENTERIC FEVER.—The number of cases notified was 34. Removed to Hospital, 2. Deaths, 7. During the previous year 43 cases were reported, and there were 7 deaths.

I have in previous reports discussed the causes of this disease and need not again do so. Of late years many cases have been found to be associated with the consumption of various shell-fish, such as oysters, cockles, and clams, and during 1902-03 cases occurred in Chatham consistent with this theory. During the present year there has been no evidence that such causes were in operation, and this is the more surprising because in the neighbouring Borough of Rochester, cases have been traced to the consumption of clams, and notices were issued concurrently in the two Boroughs warning the public of this fact.

DIARRHŒA AND ENTERITIS. — These diseases are similar in one respect, viz., that they are both due to disturbances of the intestinal tract, and as a rule when Diarrhœa is prevalent, the mortality from Enteritis also increases. but whilst the former disease is essentially a late summer disease, and as far as fatality is concerned a disease of childhood, the latter occurs more or less continuously throughout the year, and affects people at other periods of life.

During 1904 there were 69 deaths from Diarrhœa. as against 14 and 22 during 1903 and 1902 respectively. From Enteritis there were 24 deaths. With 3 exceptions the whole of the deaths from Diarrhœa occurred during the two months of August and September, there being 46 deaths in August and 20 in September. In children under 1 year of age there were 55 deaths, and 14 between the ages of 1 and 2 years, so that the broad fact stands out that some cause was at work which tended peculiarly to affect very young children, and I think that a review of the various circumstances connected with the upbringing of our infant population will repay perusal, and perhaps be of assistance in making the public realise what an appalling waste of life follows ignorance and neglect of the laws of health.

The total number of deaths from Diarrhœa was distributed as follows :—

St. Mary's Ward	.....	22
Luton Ward	.....	30
St. John's Ward	.....	16
Medway Workhouse	.....	1

SEX. Of males there were 35 and of females 34.

POSITION IN LIFE. — As regards the circumstances of the parents — they were mostly of the poorer class — 58 being returned as labourers, 3 as artisans and 8 as tradesmen.

HOUSES. — In 19 instances the sanitary condition of the premises was distinctly bad. In the remainder, whilst many were undesirable in point of size and situation, there was nothing calling for special comment. The number of rooms occupied was :—

1 room only	.....	7 cases.
2 rooms only	.....	9 cases.
3 or more rooms	.....	53 cases.

FEEDING. Only 5 infants were said to be fed entirely at the breast, 8 were fed on milk alone, and 56 on milk and other foods, chiefly bread, corn flour, tops and bottoms, potatoes, &c. Respecting the milk, in 36 instances condensed milk was used, and in more than half the cases

the milk supply was of a doubtful character. It is the custom with many of the poorer classes to buy small quantities of milk from the nearest general shop that retails milk. Very few of these places are really suitable as milk depots, and not only is the milk exposed to risk of contamination, but often the unused surplus of the previous day is either the first to be disposed of on the following day, or it is mixed with the next day's supply. Then again some cheap brand of condensed milk is obtained and the open tin is left exposed to contamination until quite used up.

Bottle feeding was carried out in 64 instances, and in 59 of these bottles with long tubes were in use. The usual way of cleansing these bottles is to stand them in cold water, but the amount of cleansing they receive by this method is quite inadequate and particles of sour milk remain behind to aid in the contamination of the fresh food. Seventeen of the children who died were stated to have been delicate from birth. The question naturally arises in connection with this heavy mortality amongst children, why it is that under the improved sanitary conditions of the present day, the large amount of skilled nursing that is available, and the diminution of the general death rate, the infantile mortality remains high ?

Its causes are of two kinds, one class unavoidable, and one, more or less, avoidable. Taking the unavoidable causes first, they comprise premature birth, malformations, the offspring of unhealthy parents, and various hereditary diseases.

The avoidable causes are, the environment, i.e. the unhealthy character of the dwelling and its surroundings, (such as defective drainage, damp foundations, and the pollution of the air by filth accumulations), the neglect of ordinary sanitary precautions, artificial feeding, and the carelessness and indifference of many parents.

It must be remembered that a high death rate generally indicates a high sickness rate, and that if many succumb, many more grow up stunted and devitalised from the effect of early illness, grow up into a race of unhealthy men and women, who reproduce immature and defective children.

Other important contributory causes are intemperance, poverty, and the occupation of the mothers.

It is a matter of common knowledge that outbreaks of Diarrhœa in towns are connected with a continued high temperature, which causes some organism to become active, and to contaminate the food of young children. When drainage is defective, where foul privies exist, and where the houses and their inmates are alike dirty, this result is much

more likely to occur than in clean, well kept, and well ventilated dwellings. The real cause is in the majority of instances to be found in the filthy habits of many people, their ignorance and their carelessness are simply appalling, they seem to have a horror of fresh air, and to similarly detest personal and domestic cleanliness. Amongst their infants, improper clothing and bad feeding are usual, foul bottles with long tubes are the rule, and every variety of unsuitable food is given, such as sago, oatmeal, cornflour, tops and bottoms, condensed milk, or a bit of "anything that is going." When milk is used it is seldom measured, and is given at irregular intervals, and in a haphazard manner. The remedies may be considered under two heads Sanitary and Educational. Under the first head comes efficient Sanitary Administration, which is or should be the first duty of every Municipal body. Its aim is to provide wholesome dwellings, good drainage, pure air, and pure water, and to see that the surroundings of every house are kept clean, and in this connection I would attach much importance to the frequent cleansing and flushing with water of all courts and alleys, especially during the dry hot months of summer.

In some towns Municipal Milk Depots have been started, and are reported on favourably. Their aim is to provide sterilised milk in suitable receptacles and quantities for the feeding of infants, and granting that in some instances they may be of help, I am by no means satisfied as to the wisdom of such a course, for two reasons. One that it is not unattended with expense to the general body of the ratepayers, and the other is that the more you provide for this class of people, the less likely they are to help themselves, and I do not think that the true function of a Sanitary Authority is to make itself either a purveyor of the various necessities of life, or a competitor in any form of trading. As regards these Municipal Milk Depots, they can never be anything but makeshifts, for even if it were possible, which it is not, to make all bottle fed children have their food from such a place, the expense would be prohibitive, and another way of lessening parental responsibility would have been provided. It is most important that there should be an effective control of the milk supply in this country, and what is really wanted is cleanliness of management in every detail, from the milking of the cow to the drinking of the liquid.

Under the second head are Educational remedies, and it is in this direction that hope of real amendment lies. That everybody should be educated in the laws of Hygiene and Domestic Economy is a truism, but my experience tells me that to attempt to inculcate these principles amongst the poorer classes, whilst admirable in theory, is a dismal failure in practice. They seem incapable of grasping the necessity for a reform in their habits, and will only attempt it whilst under supervision, and directly the supervision is withdrawn they relapse into the old style. The only way will be to teach the young, and I hope the day is not far distant when every boy and girl in the country will be taught the value

of personal and domestic cleanliness, the evils of bad habits and intemperance, the value of pure air, and, in the case of the girls especially, a knowledge of cookery and household management.

ERYSIPELAS. 37 cases were notified and 1 death occurred.

The total number of certificates received under the Infectious Diseases Notification Act was 160. This is the lowest number received for several years as the following list shows :—

1904	.....	160
1903	. . . . .	235
1902	. . . . .	276
1901	. . . . .	234
1900	. . . . .	248

Table II. shows the distribution of Infectious Diseases in each Ward.

HOSPITAL ACCOMMODATION. The total number of cases removed to the Joint Hospital was 72. Owing to the enlargement of the Institution, completed during 1903, there is now ample provision for the needs of the combined district, and at no period during the year has the admission of patients been delayed for want of room.

DISINFECTION. - Thorough disinfection is very necessary after all cases of infectious disease, and the Borough is well provided with the necessary machinery for this purpose. The rooms inhabited by the patient are fumigated with the vapour of Formic Aldehyde, and the bedding, etc., is removed in a specially constructed van to the Disinfecting Station, and there subjected to the action of superheated steam. The apparatus known as Thresh's Disinfector gives every satisfaction, and is easy to manage. The essential feature of it is the use of steam without pressure at a temperature of 106 C, superheated by using in the boiler a solution of Calcium Chloride, the boiling point of which is much above that of water. The lower part of the jacket of the Cylinder contains the Saline Solution, and acts as a boiler which is heated by a small furnace, and the steam which enters the furnace escapes continuously by a chimney. As the water evaporates its equivalent is introduced automatically from a small cistern with a ball valve. When the steam has passed for a certain length of time, the raising of a lever cuts off all communication with the inner chamber, and steam escapes into the open air. Then on opening an aperture below the door of the inner chamber, air is drawn through a coil of tubes surrounded by the boiling liquid, becomes heated, traverses the inner chamber, displaces the steam and dries the articles. The time occupied is 1 to 1½ hours. It has been in use since October, 1902, and I think that even its opponents, who prophesied that it would do infinite harm to the locality in which it was erected, must acknowledge that they were in error.

HOUSING.—Much of the property in the older parts of the Borough is of an old and unsatisfactory character, and is very difficult to keep in good order. Of late years a large amount of building has been carried out, especially in the Luton Ward, and every effort is made to secure a satisfactory type of working class dwelling, with a sufficiency of open space, and with well laid and water tight drains. A revision of the Building Bye-laws is desirable, and should be carried out.

The number of new houses erected during 1904 has been comparatively small. All plans of drainage are submitted to your Medical Officer, and the drains are adequately tested by the Sanitary Inspector before they are covered in. Fifty-six houses have been reported as unfit for human habitation under Sec. 32, Housing of the Working Classes Act, and notices to put them into a proper condition issued. A specification of the necessary work is supplied in each case. This Act was amended during 1903, and in the case of houses which are in too bad a condition to permit of repair, a closing order can be obtained at once without the preliminary notices, and in certain cases the Local Authority may demolish, and recover expenses.

SLAUGHTER HOUSES.—The registered number of these places is 17. They are regularly inspected, every owner is provided with a copy of regulations for their management, and on the whole they have been kept in a satisfactory condition. It is seldom that any nuisance arises in connection with them, but for various reasons their presence in the crowded parts of the town is undesirable, and I look forward to the future provision of a public abattoir.

COMMON LODGING HOUSES.—The Public Health Act, 1875, renders it incumbent on every Local Authority to keep a register of the Common Lodging Houses in their District, and it is a punishable offence for any person to keep a Common Lodging House unless the house is registered under the provisions of the Act. There are 13 registered Common Lodging Houses in the District, with a total of 461 beds allowed, but 449 actually in use. Their general condition on inspection is satisfactory.

DAIRIES, COWSHEDS, AND MILK SHOPS.—

No. of registered Cowkeepers	9
No. of registered Dairymen and Purveyors of Milk	29

The regulations made by the Local Government Board under the above Order are for prescribing and regulating the lighting, ventilation, cleansing, drainage, and water supply of cowsheds and dairies, and for securing the cleanliness of milk stores, milk shops, and milk vessels used for containing milk for sale by persons following the trade of cowkeepers or dairymen, and for prescribing precautions to be taken by purveyors of milk, and persons selling milk by retail, against infection or contamination.

Considering the importance of milk as a food, it is surprising that there should be so much public apathy in respect of the method of dealing with milk. Cows standing in and bespattered with manure, unwashed udders, and milkers with filthy hands, are only too common, and from the time it leaves the cow till it is delivered into the consumers' hands, the average method of handling it is not satisfactory. Of course as regards the milk produced in this district, the Sanitary Authority is able to exercise some control, but a very large quantity is imported, and we have no means of knowing anything as to the condition of the premises, animals, or workers at its source.

During the past year your Council have appointed a Veterinary Inspector, whose duty it is to visit and examine the animals in all the cowsheds throughout the Borough, once every month, and to report periodically the result of his inspection. By this means an endeavour is made to ensure the local milk supply being taken from healthy animals, and to exclude specially such cows as exhibit signs of general or local tubercle.

WATER SUPPLY.—The water supply of the Borough, derived from deep borings in the chalk, and supplemented by a boring into the lower Greensand, maintains its reputation as an excellent drinking water, and the supply is abundant in quantity. The storage capacity of the Company's reservoirs is 4,500,000 gallons, their annual output being 580,000,000 gallons, equal to a daily consumption of about 15 gallons per head.

An analysis was made during the year at the instance of the Corporation. Two samples were taken in different parts of the Borough, and were submitted to Physical, Chemical and Bacteriological examination, and the Analyst's conclusions were as follows —

“Chemically the waters are somewhat hard, but in all other respects they are of a most satisfactory character. They are in the highest class of organic purity, and free from any signs of infiltration of sea-water or surface water. Bacteriologically they are also excellent. They contain no organisms indicative of contamination. Save for the hardness, a better water for a public supply could not be desired.”

SEWERAGE AND DRAINAGE. I trust the time is not far distant when I shall be able to state that the Borough of Chatham has inaugurated a system of sewerage. It was decided some time ago that main drainage was a necessity, and various schemes of an expensive character have been proposed and discussed, but up to the present time it has been difficult to acquire a suitable site. The neighbouring City of Rochester is about to embark on a scheme of drainage, and I think that

reason and commonsense alike show that the interests of the two towns are identical, and that the natural result of their close proximity is that a combined scheme should be carried out. With a view to effecting this preliminaries have been settled, and if enquiries show that a mutual saving will result, I venture to think that such a scheme will be realised in the near future.

HOUSE REFUSE.—In some parts of the Borough where large accumulations are apt to occur this is removed daily, and in other parts two or three times a week. The new covered carts are infinitely superior to the old open dust cart, which is seldom effectually covered, and on windy days is productive of great nuisance and danger to health. Some means should be devised whereby householders should deposit their rubbish on the pavement in properly constructed receptacles instead of the varied assortment which are to be seen daily in our streets, and whose chief characteristic is their unsuitability for the purpose for which they are used. The refuse is carted away to the confines of the Borough, and undergoes a modified process of destruction. The ashes are used for brick making, and the paper, vegetable, and animal refuse, &c., is burnt.

MIDWIVES' ACT, 1902.—The object of this Act is to secure the better training and registration of Midwives, and to ensure proper supervision of their mode of practice.

The Act states that after April 1st, 1905, no woman shall take the title of Midwife, nor practice midwifery unless she is certified under this Act, and that no woman shall be certified until she has complied with the rules and regulations set forth in the Act. These rules necessitate a course of training, an examination, and subsequent certification, and for the carrying out of this plan a Central Midwives Board has been formed. Prior to the above mentioned date a certain number of women who were able to produce certificates of character, and of having been in bona fide practice as midwives for at least twelve months, were placed on the Register. Certain specific duties in connection with this Act are to be carried out by Borough Councils, and they are briefly as follows:—

(1). To exercise general supervision over all midwives practising within the area.

(2). To investigate charges of malpractice, negligence, or misconduct, on the part of any midwife practising within their area, and if a *prima facie* case be established, to report the same to the Central Midwives Board.

(3). To suspend any Midwife from practice, in accordance with the rules under the Act, if such suspension appears necessary to prevent the spread of infection.

(4). To report at once the name of any Midwife practising in their area convicted of an offence.

(5). During the month of January in each year to supply the Secretary of the Central Midwives Board, with the names and addresses of all Midwives practising within their area, and to keep a current copy of the roll of Midwives, accessible at all reasonable times for public inspection.

(6). To report deaths and changes of address of any Midwives.

(7). To give due notice of the effect of this Act.

Under Sec. 10 of the Act, any woman certified under the Act must give due notice to the Local Supervising Authority of her intention to practice, and must renew the notice in the month of January in every year.

Your Medical Officer has made periodical inspections during the year of the case books, appliances, and mode of practice of each Midwife in the District.

EMPLOYMENT OF CHILDREN ACT, 1903.—This Act came into force in January, 1904, and is the outcome of an inquiry by a Committee appointed by the Secretary of State for the Home Department, and its main recommendation was that overworking of children in such occupations as are still unregulated by law should be prevented by giving powers to County and Borough Councils. The Act is manifestly in the interests of the health of children, and your Council have now made bye laws under the Act, which will shortly receive official sanction.

WOMAN HEALTH VISITOR.—In my Annual Report for 1903 I stated fully the duties of this official, whose work is of a varied description. Primarily, she is intended to visit the homes of the poor, and by pointing out to them the evils which result from neglect of ordinary sanitary laws, to endeavour to bring about a reformation in their habits. In pursuance of this plan a large number of visits have been paid during the year, and her general work may be summarised under the following heads:—

(1). The visiting of Registered Births.

(2). Inspections made under the Factory and Workshop Act, 1901.

(3). House-to-house inspections.

The visiting of Registered Births was only carried out during a por-

tion of the year, the period in question being from June 11th to October 22nd, 1904. The total number of visits paid under this head was 329. The number of infants visited was 261. Of these 191 were fed at breast, 5 on milk, 65 on a mixed diet of milk and other foods, such as patent foods, corn-flour, oatmeal, bread, tea-cakes, &c. Eighty-four were suffering from the effects of improper clothing and want of cleanliness. One child is blind from neglect at birth and subsequent want of attention. Fifty were reported as being delicate from birth.

I have in a previous part of the present report alluded to the extraordinary ignorance of some parents in regard to the feeding and general management of their children, and to the effect of this in causing lowered health and vitality, and a correspondingly heavy mortality amongst young children, and need only say here that the information gained by the visiting of Registered Births further emphasises the statements already made.

The work of the Woman Health Visitor under the Factory and Workshop Act of 1901 will be dealt with in the Section devoted to the administration of the Act.

HOUSE TO HOUSE INSPECTIONS. Total number of houses inspected and re-inspected, 2029. Of these, 348 were re-visited on account of the insanitary condition discovered at the first visit, and 129 were the subject of frequent visits at varying intervals. In 395 cases Sanitary defects were remedied without having recourse to Statutory Notices.

In connection with house to house visitation, this official states that the greatest cause for complaint is found in the homes of people who take in home-work, because, in order to get such work finished by a given time, they have to neglect their housework, with the result that the home is neglected and untidy, meals are improperly cooked, and the children suffer from lack of attention because the mother has not time to properly attend to home duties, which should be her first care. The average earnings from this class of work are very small, probably 1d. per hour, and when this money is earned at the price of a neglected home, and consequent domestic misery, it proves a very inadequate supplement to the husband's earnings. I do not say that this is the effect in all cases, because there are instances of widows, and wives of men who are out of work, in which the necessity of earning money is the paramount consideration.

FACTORY AND WORKSHOP ACT, 1901.—Sec. 132 of this Act makes it incumbent on every Medical Officer of Health to report specifically on the administration of this Act in Workshops and Workplaces in his District, and to include his observations thereon in his Annual report. The Home Office has issued a table, which I have filled in and appended, and which contains such particulars respecting the Act as lend themselves to statistical treatment.

The chief points on which I have to report may be thus classified :—

- (1.) Sanitary condition of Workshops and Workplaces, including :
 - (a) Cleanliness.
 - (b) Air Space.
 - (c) Ventilation.
 - (d) Drainage of Floors on which wet processes are carried on.
 - (e) Provision of suitable and sufficient Sanitary Conveniences.
- (2.) Special Sanitary regulations for bakehouses.
- (3.) Home Work. - The prevention of home work being carried on in dwellings which are injurious or dangerous to the health of the workers through overcrowding, want of ventilation, or other sanitary defects, or in dwellings in which dangerous infectious disease exists.
- (4.) The keeping of lists of Out-workers in certain branches of industry, which are furnished by employers, and the transmission of the name and place of employment of any such out-worker who does not reside in the district to the Council of the district for which he works.
- (5.) The keeping of a Register of Workshops.

The total number of Non-textile Factories on the Register is 28, of Workshops 206, Bakehouses and Kitchens of Restaurants 28, Workplaces 75.

In the case of such Factories and Workshops as employ men exclusively, routine inspections have been made by your Chief Sanitary Inspector, and in all places where female labour is employed, and also in the homes of outworkers by your Woman Inspector. Written details of this work are submitted to your Medical Officer of Health, who visits as required from time to time.

The Home Office Table which is attached gives particulars of a general nature respecting the number of inspections made, and work carried out, but the following table will be of interest in showing the various industries in the District. The list is entirely concerned with male employment.

NON-TEXTILE FACTORIES. Bakehouse, 1 ; Bookbinders, 1 ; Electrical Works, 2 ; Mineral Water Works, 6 ; Joinery and Saw, 6 ; Printing, 5 ; Tobacco, 1 ; Flour, 2 ; Engineering, 1 ; Soap Melting, 1 ; Blanket Washing. 2.

WORKSHOPS. —Cabinet Makers, 7 ; Upholsters, 3 ; Polishers, 2 ; Brass Finishers and Polishers, 2 ; Plumbers, 4 ; Painters, 2 ; Modellers, 1 ; Saddlers, 5 ; Sweet Makers, 5 ; Rag Merchants, &c., 1 ; Cycle Works,

2; Tailors, 9; Bootmakers, 10; Undertakers, 2; Carpenters and Joiners, 25; Cooper, 1; Hoopmaker, 1; Ornamental Masons, 2; Blindmakers, 2; Smiths, 6; Coachbuilders and Wheelwrights, 6; Picture Frame Makers, 3; Clay Pipe Maker, 1; Tin Smiths, 2.

WORKPLACES.—Stables, 10; Bottling, 6; Gate Making, &c., 2; Saddle Making, 1; Hair Cutting, 50; Wharves, 6.

In connection with the above there have been 42 inspections of Factories and Laundries, 341 of Workshops and 20 of Workplaces. 21 Written Notices respecting defects found were posted.

The following defects were dealt with; want of cleanliness 6, want of ventilation 1, want of drainage of floors 2, unsuitable sanitary accommodation 2, failure to affix Abstract of Act. 3.

With respect to places employing Female Labour the following work has been carried out :—

Factories and Workshops inspected	102
„ „ re-inspected	95
Kitchens of Restaurants inspected	11
Homes of Outworkers inspected and re-inspected	693
Total . .	901

The following list of women employed in various trades will be of interest:

Tailors	101
Clothiers	306
Dressmakers	168
Milliners	64
Shirtmakers	23
Laundresses	41
Outfitters	23
Bookbinders	18
Tea-packers	7
Other minor employments	31
Total	702

The above number is exclusive of women employed as out-workers, of whom there are 325 on the Register.

The following statement is supplementary to the figures set out in the Home Office Table, and summarises work done in connection with female labour.

General complaints received	3
Number of defects found	29
Defects remedied	22
Intimation Notices served	14

Contraventions of Factory and Workshop Act.

No Abstract of Act	2
Overcrowding	3
Want of cleanliness in workrooms	11
Work taken from out-workers on account of in-sanitary state of dwellings	3
Overtime (Reported to H.M. Inspector)	1
Want of ventilation	2
Lavatory cleansed	1
No separate accomodation for sexes	4
New Sanitary Accomodation	2

Number of firms employing Chatham women as Out-workers:—

Borough of Chatham	11
City of Rochester	7
City of London	3

Number of Chatham Firms employing women in other Boroughs:—

City of Rochester	7
Borough of Gillingham	3
Borough of Maidstone	1

During 1904, 781 women were employed as indoor hands, as compared with 1097 during 1903, and 69 men were working in women's work-rooms as compared with 77 during the previous year.

With respect to the question of Sanitary Accommodation in Factories and Workshops, the special sections of the Act dealing with this matter are inoperative here, and all offences are dealt with under Sec. 22, Public Health Amendment Act, 1890, and under this Section the Borough Surveyor is the official specially charged with dealing with the provisions of the Section in regard to sufficiency and suitability. The number of cases referred to him will be found in the Home Office Table.

BAKEHOUSES. The total number of Bakehouses on the Register is 25, of which 10 are underground bakehouses. These places are the subject of special sanitary regulations set out in Sections 97 to 102 of the Factory and Workshop Act. Under these regulations there must be no w.c. or drain either within or in direct of communication with a bakehouse, and the cistern supplying water to a bakehouse must be separate and distinct from the w.c. cistern. The inside walls and ceil-

ings of bakehouses must be limewashed or painted with oil and varnished, and the limewashing and cleansing of paint must be done every six months. No sleeping place is permitted on the same floor as a bakehouse unless constructed according to the requirements of the Act.

The Underground Bakehouses were in use before the passing of the Act, but it was enjoined under Sec. 101 that no underground bakehouse should be used after January 1st, 1904, unless certain stipulations with regard to construction, light, and ventilation were carried out. A specification of the work required was given in every instance, and in last year's report I set out the general principles of these specifications, which were well carried out. They apply only to existing underground bakehouses, as in future no new ones will be allowed.

The general condition of the Bakehouses in the Borough is satisfactory, and the owners are as a rule willing and anxious to carry out any suggestions for their keeping and management.

I am again indebted to Mr. Coles Finch, of Luton, for supplying me with statistics of rainfall during the year.

In conclusion, I desire to thank most heartily the Chairman and Members of the Sanitary Committee for the kind consideration they have always shown in regard to any suggestions or recommendations I have had to make during the year.

I remain, Gentlemen,

Your obedient servant,

J. HOLROYDE, F.R.C.S.E., D.P.H.,

Medical Officer of Health.

Chatham,

March 4th, 1905.

Appended are Tables I., II., III., and IV., issued by the Local Government Board.

Home Office Table for returns under the Factory and Workshop Act.

Statistics of Rainfall.

Sanitary Inspector's Report

TABLE I. CHATHAM.—For Whole District.

Year.	Population estimated to middle of each year.	No. of Births.	Birth Rate.*	Deaths under 1 Year.	Rate per 1,000 Births Registered.	Total Deaths at all ages.	Total Death Rate.*	Deaths in Public Institutions.	Deaths of Non-residents registered in District.	Deaths of Residents registered beyond District.	Deaths at all Ages. Nett.	Death Rate* at all Ages. Nett.
1894 ..	33257	902	26.9	115	127	509	15.2	144	29	28	500	15.2
1895 ..	33880	979	28.9	144	148	580	17.1	156	36	48	592	17.5
1896 ..	34503	1000	29.3	123	123	549	16.8	135	35	68	582	17.0
1897 ..	34926	1023	29.3	158	155	604	17.2	135	40	32	596	17.1
1898 ..	35499	1038	29.0	176	168	698	19.7	185	53	66	711	20.05
1899 ..	35972	1062	29.5	193	180	731	20.3	173	38	45	738	20.04
1900 ..	36495	1065	29.02	168	165	702	19.4	188	50	63	715	19.5
1901 ..	37057	1022	27.9	157	154	648	17.4	149	45	37	638	17.2
1902 ..	37732	1066	28.2	174	163	676	17.9	163	53	51	674	17.8
1903 ..	38407	1112	28.9	143	129	583	15.0	155	40	31	574	14.9
Averages for years 1894 to 1903.	35778	1027	28.6	150	151	628	17.6	158	42	47	634	17.6
1904 ..	39179	1172	29.9	209	178	659	16.8	175	71	29	630	16.0

*Rates calculated per 1,000 of estimated population.

Institutions within the District receiving sick and infirm persons from outside the District.

Medway Union Infirmary

Melville Hospital (Naval)

Institutions outside the District receiving sick and infirm persons from the District.

St. Bartholomew's Hospital, Rochester.

St. William's Hospital for Infectious diseases, Rochester.

Fort Pitt Hospital (Military), Rochester.

NOTES TO TABLE I:

The Deaths to be included in Column 7 of this Table are the whole of those registered during the year as having actually occurred within the district or division. The Deaths to be included in Column 12 are the number in Column 7, corrected by the subtraction of the number in Column 10 and the addition of the number in Column 11.

By the term "Non-residents" is meant persons brought into the district on account of sickness or infirmity, and dying in public institutions there; and by the term "Residents" is meant persons who have been taken out of the district on account of sickness or infirmity, and have died in public institutions elsewhere.

The "Public Institutions" to be taken into account for the purposes of these Tables are those into which persons are habitually received on account of sickness or infirmity, such as hospitals, workhouses and lunatic asylums. A list of the Institutions in respect of the deaths in which corrections have been made should be given on the back of this Table.

Area of District in acres (exclusive of area covered by water) 4444.298. Total population at all ages, 37,057. Number of inhabited houses, 7,242. Average number of persons per house, 5.1; at Census of 1901.

TABLE II.

CHATHAM URBAN DISTRICT.

NAMES OF LOCALITIES	WHOLE DISTRICT.			ST. MARY'S WARD.				LUTON WARD				ST. JOHN'S WARD.				WORKHOUSE.		M.L. HOS.
	Population esti- mated to middle of each year.	Births Registered.	Deaths at all Ages.	Deaths under 1 year.	Population esti- mated to middle of each year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.	Population esti- mated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.	Population esti- mated to middle of each Year.	Births registered.	Deaths at all Ages.	Deaths under 1 Year.	Deaths at all Ages.	
1894 ..	33257	902	509	115	10345		134	50	12697		124	28	10315	107	32	117	5	27
1895 ..	33880	979	580	144	10435		158	54	13120		159	46	10325	107	36	127	9	29
1896 ..	34503	1000	549	123	10367		144	40	13571		163	47	10465	107	32	104	3	31
1897 ..	34926	1023	604	158	10365		159	54	13865		182	61	10696	128	38	113	3	22
1898 ..	35449	1038	698	176	10459		176	50	14074		210	72	10916	127	46	151	1	34
1899 ..	35972	1062	731	193	10310		197	63	14590		207	77	11072	154	48	133	6	40
1900 ..	36495	1065	715	168	10027		176	55	15107		199	57	11361	139	50	158	6	30
1901 ..	37057	102	638	157	11706		176	63	15125		204	60	10226	152	31	82	3	24
1902 ..	37732	1066	674	174	10190	248	174	56	15316	538	209	62	12232	171	48	96	8	24
1903 ..	38407	1112	574	143	9555	246	137	42	17312	565	178	54	11572	144	41	88	6	27
Averages of Years 1894 to 1903.	35778	1027	627	150	10376		163	53	14477		183	56	10918	134	40	116	5	29
1904	39179	1172	630	209	9552	247	153	59	18000	615	214	88	11878	159	54		8	

NOTES TO TABLE II:

- (a) The separate localities adopted for this Table should be areas of which the populations are obtainable from the census returns, such as wards, parishes or groups of parishes, or registration sub-districts. Block I may, if desired be used for the whole district: and blocks 2, 3, &c., for the general localities. In small districts without recognised divisions of known population this Table need not be filled up
- (b) Deaths of residents occurring in public institutions beyond the district are to be included in sub-columns *c* of this table, and those of non-residents registered in public institutions in the district excluded. (See note on Table I. as to meaning of terms "resident" and "non-resident.")
- (c) Deaths of residents occurring in public institutions, whether within or without the district, are to be allotted to the respective localities according to the addresses of the deceased.
- (d) Care should be taken that the gross totals of the several columns in this Table, respectively equal the corresponding totals for the whole districts in table I. and IV.: thus, the totals of sub-columns *a*, *b*, and *c* should agree with the figures for the year in the columns 2, 3, and 12, respectively, of Table I.: the gross total of the sub-columns *c* should agree with the total of column 2 in Table IV., and the gross total of sub-columns *d* with the total of column 3 in Table IV.

TABLE III.

CHATHAM DISTRICT.

Cases of Infectious Diseases notified during the year 1904.

Notifiable Diseases.	Cases Notified in Whole District.						Total Cases Notified in each Locality.					No. of Cases removed to Hospital.					
	At all Ages.	Under 1 Year.	1 to 5.	5 to 15.	15 to 25.	25 to 65.	65 and upwards.	ST. MARY'S WARD.	LUTON WARD.	ST. JOHN'S WARD.	MEDWAY WORKHOUSE.	MELVILLE HOSPITAL.	ST. MARY'S WARD.	LUTON WARD.	ST. JOHN'S WARD.	MEDWAY WORKHOUSE.	MELVILLE HOSPITAL.
Diphtheria	25	1	2	13	7	2	0	7	12	5	1	0	4	4	3	1	0
Membranous Croup . .	1	0	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0
Erysipelas	37	1	3	1	7	23	2	10	11	9	7	0	0	0	0	0	0
Scarlet Fever	61	2	19	33	3	4	0	17	26	18	0	0	15	21	11	0	0
Enteric Fever.	34	0	2	7	7	18	0	18	9	6	1	0	7	2	3	0	0
Puerperal Fever . .	2	0	0	0	0	2	0	0	2	0	0	0	0	0	0	0	0
Totals	160	4	27	54	24	49	2	52	60	39	9	0	26	27	18	1	0

NOTES TO TABLE III.

The localities adopted for this table should be the same as those in Tables II and IV.

State in space below the name of the Isolation Hospital, if any, to which residents in the district, suffering from infectious disease, are usually sent. Mark (H) the locality in which it is situated, or if not within the district, state where it is situated, and in what district. Mark (W) the locality in which a workhouse is situated.

* This space may be used for record of other disease the notification (compulsory or voluntary) of which is in force in the district.

† These age columns for notifications should be filled up in all cases where the Medical Officer of Health, by enquiry or otherwise, has obtained the necessary information.

Isolation Hospital: Joint Hospital, situated at Rochester.

TABLE IV. CHATHAM DISTRICT.

Causes of, and Ages at, Death during Year 1904.

Causes of Death.	Deaths in whole District at Sub-joined Ages.							Deaths in Localities (at all ages.)					Total Deaths in Public Institutions
	All Ages.	Under 1 Year.	1 and under 5 Years.	5 and under 15 Years.	15 and under 25 Years.	25 and under 65 Years.	65 and upwards.	St. Mary's Ward.	Luton Ward.	St. John's Ward.	Medway Workhouse.	Melville Hospital.	
Measles	10	3	7					1	8	1			
Scarlet Fever	1	1											
Whooping-cough	2	1	1						2				
Diphtheria and membranous croup	2	1	1					1		1			
Fever, Enteric	7				5	2		3	2	1		1	2
Epidemic influenza	1						1		1				
Diarrhoea ..	69	55	14					22	30	16	1		
Enteritis ..	24	17	2			1	4	6	5	9	4		4
Puerperal Fever	1					1			1				
Erysipelas ..	1	1								1			
Other Septic Diseases ..	7			2	1	3	1	1	2	1		3	5
Phthisis	75	1	2	7	4	56	5	21	24	13	13	4	33
Other Tubercular diseases..	14	5	3	4	2			6	3	5			1
Cancer, Malignant Disease	31					18	13	2	9	10	8	2	16
Bronchitis ..	39	16	5			5	13	11	15	11	2		4
Pneumonia ..	43	11	10	4		12	6	11	11	18	1	2	9
Other Diseases of Respiratory Organs	4	1		1	1		1	1	2			1	1
Alcoholism Cirrhosis of Liver ..	11					9	2	4	1	2	4		4
Venereal Diseases	12	7		1		4		5	1	3	3		3
Premature Birth	50	50						7	27	14	1		1
Diseases and Accidents of Parturition ..	3	1				2			2	1			
Heart Diseases	54	3		2	6	29	14	11	22	14	6	1	18
Accidents ..	15	5	1			5	4	7	1	3	3	1	4
Nervous System	56	14	5	2	2	16	17	8	23	16	7	2	15
Urinary System	18	1		1		10	6	2	5	4	6	1	11
All other causes	79	15	1	1	2	20	40	22	15	15	22	5	44
All Causes..	630	209	52	25	23	193	128	153	214	159	81	23	175

NOTES TO TABLE IV :

- (a) In this Table all Deaths of "Residents" occurring in Public Institutions, whether within or without the district, and to be *included* with other deaths in the columns for the several age groups (columns 2-8). They are also, in columns 9-15, to be *included* among the deaths in their respective "Localities" according to the previous addresses of the deceased as given by the Registrars. Deaths of "Non-residents" occurring in Public Institutions in the district are in like manner to be *excluded* from columns 2-8 and 9-15 of this Table.
- (b) See notes on Table I. as to the meaning of "Residents" and Non-residents," and as to the "Public Institutions" to be taken into account for the purposes of these Tables. The "Localities" should be the same as those in Tables II. and III.
- (c) All Deaths occurring in Public Institutions situated within the district, whether of "Residents" or of "Non-residents," are, in addition to being dealt with as in note (a), to be entered in the last column of this Table. The total number in this column should equal the figures for the year in column 9, Table I.
- (d) The total Deaths in the several "Localities" in columns 9-15 of this Table should equal those for the year in the same localities in Table II., sub-columns c. The total Deaths at all ages in column 2 of this Table should equal the gross total of columns 9-15, and the figures for the year in column 12 of Table I.
- (e) Under the heading "Diarrhœa" are to be included Deaths certified as from diarrhœa alone or in combination with some other cause of ill-defined nature; and also deaths certified as from Epidemic enteritis; Zymotic enteritis; Epidemic diarrhœa; Summer diarrhœa; Dysentery and dysenteric diarrhœa; Choleraic diarrhœa, cholera, cholera nostras (in the absence of Asiatic cholera).

Under the heading of "Enteritis" are to be included those certified as from Gastro-enteritis, Muco-enteritis, and Gastric catarrh, unless from information obtained by enquiry from the certifying practitioner or otherwise, the Medical Officer of Health should have reason for including such deaths, especially those of infants, under the specific term "Diarrhœe." Deaths from diarrhœa secondary to some other well-defined disease should be included under the latter.

Under the headings of "Cancer" and "Puerperal Fever" should be included all registered deaths from causes comprised within these general terms.

In according the facts under the various headings of Tables I, II III and IV., attention has been given to the notes on the Tables.

FACTORIES, WORKSHOPS, LAUNDRIES, WORK- PLACES AND HOMEWORK.

BOROUGH OF CHATHAM

1. INSPECTION.

INCLUDING INSPECTIONS MADE BY SANITARY INSPECTORS OR INSPECTORS
OF NUISANCES.

Premises.	Number of		
	Inspections.	Written Notices.	Prosecutions.
Factories (including Factory Laundries.)	51	8	
Workshops (including Workshop Laundries) ..	407	31	
Workplaces	47	1	
Home-workers' Premises	693	3	
Total	1198	43	

2. - DEFECTS FOUND.

Particulars.	No. of Defects.			Number of Prosecutions.
	Found.	Remedied.	Referred to H.M. Inspector.	
<i>Nuisances under the Public Health Acts:—*</i>				
Want of cleanliness	17	17		
Want of ventilation	3	3		
Overcrowding	3	3		
Want of drainage of floors	2	2		
Other nuisances	2	2		
†Sanitary Accomodat'ns				
{ insufficient				
{ unsuitable or de-				
{ fective	4	2		
{ not sep'te for sexes	4	4		
<i>Offences under the Factory and Workshop Act:—</i>				
Illegal occupation of underground bakehouse				
Breach of special sanitary requirements for bakehouses				
Failure as regards lists of outworkers				
Giving out work to be done } unwholesome	3	3		
in premises which are } infected	4	4		
Public Health Acts Amendment Act, 1890, adopted				
1 w.c. to every 25 adults				
Total	42	40		

3. — OTHER MATTERS.

Class.				Number
Matters notified to H.M. Inspectors of Factories : —				
Failure to affix Abstract of the Factory and Workshop Act				5
Action taken in matters referred by H.M. Inspectors as remediable under the Public Health Acts, but not under the Factory Act (S. 5)				Notified by H.M. Inspectors or Reports (of action taken) sent to H.M. Inspectors.
Other				
Underground Bakehouses.				
In use during 1903				8
Certificates granted in 1903				10
in 1904				none
In use at end of 1904				10
Homework : —				Number of
<i>Lists of Outworkers :—</i>				Lists. Outworkers.
Lists received				13 758
Addresses of outworkers				forwarded to other Authorities 3 73
				received from other Authorities 4 41
<i>Homework in unwholesome or infected premises :—</i>				Wear'g Apparel Other
Notices prohibiting homework in unwholesome premises				3
Cases of infectious disease notified in homeworkers' premises				4
Orders prohibiting homework in infected premises				4
Workshops on the Register at the end of 1904.				
Non-textile factories				28
Workshops				206
Bakehouses and kitchens of Restaurants ..				28
Workplaces				75
Total number of workshops on Register				337

RAINFALL DURING 1904.

Taken at Luton by Mr. Coles Finch.

	DEPTH IN INCHES.			
January	3·31
February	2·84
March	1·41
April	·71
May	1·33
June		1·24
July	2·55
August	1·91
September	·86
October	1·46
November	1·25
December	2·62

Total fall for twelve months, 21·49 inches.

ANNUAL REPORT OF THE INSPECTOR OF NUISANCES FOR 1904.

Sanitary and Health Department,

(Office No. 5.)

Town Hall, Chatham.

GENTLEMEN,

I beg to place before you my fifth Annual Report, showing the various matters relating to Sanitary Work carried out in the Borough during the year 1904.

INFECTIOUS DISEASE.—The number and description of the cases of Infectious Diseases notified will be found in the Report of the Medical Officer of Health.

Seventy-four cases of Infectious Diseases were removed by the Assistant Sanitary Inspector to the Hospital, all infected houses were disinfected, and 104 loads of bedding removed to the Steam Disinfector.

The Steam Disinfector was thoroughly overhauled and examined in the early part of the year, and not a single claim for compensation for damage has been made, which speaks most favourably for the working of the Disinfector.

No cases of Small Pox occurred during the year.

REMOVAL OF DEAD BODIES.—The Medical Officer of Health has been called upon to grant certificates for the removal of 9 dead bodies as against 9 last year.

The arrangement made between the Poor Law Authority and the Sanitary Authority concerning this matter continues to work well.

DISEASES OF ANIMALS ACT. Swine Fever has been prevalent throughout Kent during the year, this district being declared a Swine Fever Infected Area.

Swine Fever occurred at Capstone, Star Mill piggery, and the Gipsy Encampment.

Last year no cases of Glanders occurred, but this year unfortunately such was not the case.

There were 5 cases of Glanders and one case of Epizootic Lymphangitis.

The fact of this being a Swine Fever Infected Area has caused a considerable amount of work, no less than 259 licenses being granted giving permission for the removal of 1041 pigs.

The horses found suffering with Glanders and Epizootic Lymphangitis were removed at six o'clock in the morning to Street End where they were killed and buried in lime before 8 o'clock a.m.

SLAUGHTER HOUSES.—The number of Slaughter Houses in the District still remains at 17.

One carcase of beef was destroyed, the same being found to be infected with Tuberculosis.

Four notices for want of cleanliness were served, and repairs carried out at one establishment.

Visits are constantly made to these premises, and few complaints have arisen.

OBNOXIOUS TRADES. Not one complaint has been received against the two gut-scraping establishments in the District, although their business has considerably increased owing to the contract for the removal of offal from the large Slaughter Houses in the New Naval Barracks at Gillingham being obtained by them.

COMMON LODGING HOUSES. The registered Common Lodging Houses number 13. This number includes an additional one which was registered during the year. The whole of the necessary work required to be done at the Gordon Chambers was carried out after service of Statutory Notice.

The majority of the Lodging Houses require no alterations or repairs.

Constant visits were made and the premises have again been free from Infectious Disease.

FISH OFFAL COLLECTION.—During the year the method of Fish Offal Collection has been improved.

The fish offal is collected in tins and taken away in closed vans into the country, the tins are then cleansed and disinfected. The amount paid per week by the fishmongers amounts to an average of seventeen shillings. About four and a half tons of fish offal are moved every week.

COWSHEDS, DAIRIES, AND MILKSHOPS. The cowsheds and milkshops were visited from time to time, and caution given for the prevention of the contamination of milk.

The cowsheds registered number 9, and the milkshops 29.

Alterations in drainage work were made at two cowsheds, and ten notices for required cleansing at various milkshops.

CESSPOOL WORK. During the year this work has been hard to keep under, no less than 2,090 applications being received. Of this number 54 were found not required, and 112 choked drains were cleared.

FACTORY AND WORKSHOP ACT. The work carried on under this heading will be found in the Report of the Medical Officer of Health.

DRAINAGE WORK. The work under this heading has been very quiet, building operations being less brisk than has been known for many years.

The drainage of new houses was tested and inspected.

A record of work done in connection with drainage to new houses, new drainage to old houses, alterations, repairs, etc., will be found in the table at the conclusion of the report.

I remain, Gentlemen,

Yours obediently.

W. G. JOELS.

RECORD OF SANITARY WORK.

Bell traps removed	24
Brick drains removed	2
Concrete yards repaired	30
Choked drains cleared	112
Cesspools constructed	25
Cesspools filled in	10
Cesspools deepened	65
Cesspools ventilated	25
Closet structures re-built	9
Drains repaired	18
Houses with old drains replaced by new	15
Houses repaired inside (ceilings, walls, &c.)	43
Houses repaired outside (walls, &c.)	34
Houses supplied with concrete yards	18
Houses with privies supplied with drainage	25
New sink waste drains provided	33
Overcrowding abated	1
Offensive matters removed	10
Privies repaired	23
Privies filled in	31
Panned and trapped closets supplied	31
Untrapped drains trapped	22
Urinals built or repaired	4
Drains to new houses (tested)	278
Miscellaneous	16